APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,717	03/26/2004	Hans-Ove Hagelin	19378.0084	8088

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EXAMINER
DATSKOVSKIY, SERGEY

ART UNIT	PAPER NUMBER
2121	

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/809,717	HAGELIN, HANS-OVE
	Examiner	Art Unit	
	Sergey Datskovskiy	2121	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 March 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is

closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-13</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-13</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>26 March 2004</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage

        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>25 May 2004</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____ .

DETAILED ACTION

1.   Claims 1-13 have been submitted for examination.

2.   Claims 1-13 have been rejected.

Drawings

3.   The drawings are objected to because the drawing Figure 6 contains text that is
not in English. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are
required in reply to the Office action to avoid abandonment of the application. Any
amended replacement drawing sheet should include all of the figures appearing on the
immediate prior version of the sheet, even if only one figure is being amended. The
figure or figure number of an amended drawing should not be labeled as "amended." If
a drawing figure is to be canceled, the appropriate figure must be removed from the
replacement sheet, and where necessary, the remaining figures must be renumbered
and appropriate changes made to the brief description of the several views of the
drawings for consistency. Additional replacement sheets may be necessary to show the
renumbering of the remaining figures. Each drawing sheet submitted after the filing date
of an application must be labeled in the top margin as either "Replacement Sheet" or
"New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the
examiner, the applicant will be notified and informed of any required corrective action in
the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4.   Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5.   The abstract of the disclosure is objected to because of the use of legal phraseology "inter alia" on line 7 and "said" on line 14. Correction is required. See MPEP § 608.01(b).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).
A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).
Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6.   Claims 3, 11 and 12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 8, 12 and 9 of U.S. Patent No. 6,772,055, respectively. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims of the application are broader than the claims of the patent. See claim chart below which lays out the corresponding claims of the patent and the application.

7.   Claims 3, 11 and 12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 6, 2 and 8 of copending Application No. 10/169,382, respectively. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims of the copending application are broader than the claims of the application that's being examined. See claim chart below which lays out the corresponding claims of both applications.

This is a _provisional_ obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Double Patenting Claims Correspondence Chart

	App. No. 10/809,717	U.S. Patent No. 6,772,055	App. No. 10/169,382
Claim No.	3	8	6
	11	12	2
	12	9	8

Claim Rejections - 35 USC § 101

35 U.S.C. §101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8.   The invention as disclosed in claims 1-13 is directed to non-statutory subject matter.

Regardless of whether any of the claims are in the technological arts, none of them is limited to practical applications in the technological arts. Examiner finds that *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) controls the 35 U.S.C. §101 issues on that point for reasons made clear by the Federal Circuit in *AT&T Corp. v. Excel Communications, Inc.*, 50 USPQ2d 1447 (Fed. Cir. 1999). Specifically, the Federal Circuit held that the act of:

> ...[T]aking several abstract ideas and manipulating them together adds nothing to the basic equation. *AT&T v. Excel* at 1453 quoting *In re Warmerdam*, 33 F.3d 1354, 1360 (Fed. Cir. 1994).

Examiner finds that Applicant's reference to "an entity" is just such abstract ideas.

Examiner bases his position upon guidance provided by the Federal Circuit in *In re Warmerdam*, as interpreted by *AT&T v. Excel*. This set of precedents is within the same line of cases as the *Alappat-State Street Bank* decisions and is in complete agreement with those decisions. *Warmerdam* is consistent with *State Street*'s holding that:

> Today we hold that *the transformation of data, representing <u>discrete dollar</u> <u>amounts,</u> by a machine through a series of mathematical calculations into a final share price*, constitutes a practical application of a mathematical algorithm, formula, or calculation because it produces 'a useful, concrete and tangible result" -- *a final share price momentarily fixed for recording purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.* (emphasis added) *State Street Bank* at 1601.

True enough, that case later eliminated the "business method exception" in order to show that business methods were not per se nonstatutory, but the court clearly *did not* go so far as to make business methods *per se statutory*. A plain reading of the excerpt above shows that the Court was *very specific* in its definition of the new *practical application*. It would have been much easier for the court to say that "business methods were per se statutory" than it was to define the practical application in the case as "...the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price..."

The court was being very specific.

Additionally, the court was also careful to specify that the "useful, concrete and tangible result" it found was "a final share price momentarily fixed for recording purposes and even accepted and <u>relied upon</u> by regulatory authorities and in subsequent <u>trades.</u>" (i.e. the trading activity is the <u>further practical use</u> of the real world <u>monetary</u> data beyond the transformation in the computer – i.e., "post-processing activity".)

Applicant cites no such specific results to define a useful, concrete and tangible result. Neither does Applicant specify the associated practical application with the kind of specificity the Federal Circuit used.

Furthermore, in the case *In re Warmerdam*, the Federal Circuit held that:

> ...[T]he dispositive issue for assessing compliance with Section 101 in this case is whether the claim is for a process that goes beyond simply manipulating 'abstract ideas' or 'natural phenomena' ... As the Supreme Court has made clear, '[a]n idea of itself is not patentable, ... *taking several abstract ideas and manipulating them together adds nothing to the basic equation*. In re Warmerdam 31 USPQ2d at 1759 (emphasis added).

Since the Federal Circuit held in *Warmerdam* that this is the "dispositive issue" when it judged the usefulness, concreteness, and tangibility of the claim limitations in that case, Examiner in the present case views this holding as the dispositive issue for determining whether a claim is "useful, concrete, and tangible" in similar cases. Accordingly, the Examiner finds that Applicant uses an abstract term "entity", which could mean almost anything. According to inventor's own description, page 4, line 22 of the disclosure says: "It should be noted that said entity may be almost any entity." Since the claims are not limited to exclude such abstractions, the broadest reasonable interpretation of the claim limitations includes such abstractions. Therefore, the claims are impermissibly abstract under 35 U.S.C. §101 doctrine.

Since *Warmerdam* is within the *Alappat-State Street Bank* line of cases, it takes the same view of "useful, concrete, and tangible" the Federal Circuit applied in *State Street Bank*. Therefore, under *State Street Bank*, this could not be a "useful, concrete and tangible result". There is only manipulation of abstract ideas.

The Federal Circuit validated the use of *Warmerdam* in its more recent *AT&T Corp. v. Excel Communications, Inc.* decision. The Court reminded us that:

> Finally, **the decision in In re Warmerdam**, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) **is not to the contrary.** *** The court found that the claimed process did nothing more than manipulate basic mathematical constructs and concluded that 'taking several abstract ideas

> **and manipulating them together adds nothing to the basic equation'**;
> hence, the court held that the claims were properly rejected under §101 ...
> Whether one agrees with the court's conclusion on the facts, <u>the holding of
> the case is a straightforward application of the basic principle that mere laws
> of nature, natural phenomena, and abstract ideas are not within the
> categories of inventions or discoveries that may be patented under §101</u>.
> (emphasis added) AT&T Corp. v. Excel Communications, Inc., 50
> USPQ2d 1447, 1453 (Fed. Cir. 1999).

Remember that in *In re Warmerdam*, the Court said that this was <u>the dispositive issue</u> to be considered. In the *AT&T* decision cited above, the Court <u>reaffirms</u> that this is the issue for assessing the "useful, concrete, and tangible" nature of a set of claims under 101 doctrine. Accordingly, Examiner views the *Warmerdam* holding as the dispositive issue in this analogous case.

The fact that the invention is merely the manipulation of *abstract ideas* is clear. The objects referred to by Applicant's phrase "entity" do not provide <u>limitations</u> in the claims to practical applications in the technological arts. Consequently, the necessary conclusion under *AT&T, State Street* and *Warmerdam,* is straightforward and clear. The claims take an abstract idea (i.e. "entity") and manipulate with it adding nothing to the basic equation.

Claims 1-13 are, thereby, rejected under 35 U.S.C. §101.

9.   Limitations of the independent claim 1 contain a method for establishing rules and a device for generating decision support. Thus, claim 1 appears to simultaneously claim a method and an apparatus.

See MPEP 2173.05(p)(II), which states:

> A single claim which claims both an apparatus and the method steps of using the
> apparatus is indefinite under 35 U.S.C. 112, second paragraph. In Ex parte Lyell, 17
> USPQ2d 1548 (Bd. Pat. App. & Inter. 1990), a claim directed to an automatic
> transmission workstand and the method steps of using it was held to be ambiguous and
> properly rejected under 35 U.S.C. 112, second paragraph.

> Such claims should also be rejected under 35 U.S.C. 101 based on the theory that the
> claim is directed to neither a "process" nor a "machine," but rather embraces or overlaps
> two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so
> as to set forth the statutory classes of invention in the alternative only. Id. at 1551.

Therefore, claim 1 is rejected under 35 U.S.C. §101. Claims 2-13 are rejected based on their dependency upon a rejected base claim.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

10.   Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 contains the phrase "said method comprises the steps of:" shortly followed by "said decision support window to a user". It is not clear how a decision support window can be referred to as step in a method. Therefore, the following rejection on prior art of claim 1 is done based on the claim as best understood by the Examiner.

Claims 2-13 are rejected based on their dependency upon a rejected base claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11.   Claims 1-3 and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated

by Cypher at al. (US Patent No. 5,566,295).

Claim 1

Cypher (295) teaches a method of establishing rules for a device used for

generating decision support for decisions which determine the behavior of an entity

and/or for controlling the behavior of an entity (the device is disclosed as a graphical

simulator, which can be a vehicle simulator; see col. 1, lines 29-32), which device

comprises:

a supervising unit arranged to handle a rule system for the behavior (Fig. 1,

combination of elements 18,20,22 and 30; col. 6, lines 10-23), wherein the supervising

unit comprises at least one storage member in which a rule structure comprising a set of

completely or partly ready-formulated rules for the behavior is stored (Fig 1, element 22;

col. 6, lines 14-16),

a user interface comprising first means for presenting information to a user of the

device (Fig. 1, element 16; col. 6, line 13) and second means for inputting instructions to

said supervising unit (Fig. 1, element 14; col. 6, lines 11-12),

wherein the device is arranged such that said rule structure is such that a rule

(col. 6, lines 48-50) comprises one or more premises (col. 6, lines 50-53) and one or

more conclusions (col. 6, lines 53-58, premises are represented by "before" states

which may either occur or not occur during execution, thus being either true or false,

and conclusions are represented by "after" states),

wherein the device is arranged such that the rule system is divided into a plurality

of states for different parts of said behavior (col. 10, lines 52-53; col. 10, lines 66-67.

Behavior is described by rules, where each rule has a simulation context, which is

defined as a simulation state), wherein each state comprises one or more of said rules

(col. 6, lines 48-50),

wherein the device is arranged to via said first means present a decision support

window which comprises at least one area which represents one of said states, wherein

this area comprises names which identify different rules which form part of the state

(Fig. 3C; col. 10, lines 31-34),

wherein said method comprises the steps of:

running said device in a real or simulated version of said entity such that the

entity goes through a behavior or a behavior scenario (disclosed as simulation, see Fig.

7, col. 19, lines 22-28),

said decision support window to a user,

allowing the user to make decisions by, via said second means, inputting

instructions which mean that one or more conclusions which form part of a certain rule,

the name of which is currently shown in said area in the decision support window, shall

be executed (Fig. 8; col. 19, lines 66-67, col. 20, lines 1-5; inputting instructions is

disclosed as programming by demonstration),

analyzing the decisions which have been made by the user (col. 20, lines 6-8),

and determining or modifying the rules for which the user has made decisions

concerning that one or more conclusions shall be executed out in accordance with the

analysis that has been carried out (Figs. 9A and 9B; col. 20, lines 13-67. Disclosed

steps of determining if the simulation context has been adjusted, if an object has been

moved, and if a property modification has been done, define the content of a new rule

that has been generated).

Claim 2

Cypher (295) teaches a method according to claim 1, wherein the device is

arranged such that said premises shall be able to either be true or false and wherein

said conclusions are predetermined and pre-programmed (col. 6, lines 53-58, premises

are represented by "before" states which may either occur or not occur during

execution, thus being either true or false, and conclusions are represented by "after"

states), and wherein the device is arranged such that said rule structure is such that

each premise in the rule can be assigned an indicator (col. 15, lines 29-41) which can

indicate at least two different conditions, namely a first condition which means that the

premise shall be true and a second condition which means that the premise shall be

false (col. 15, lines 50-56, where combining an expression with Boolean operators allow

to specify at least two different conditions in the condition menu), wherein at least one

conclusion is intended to be executed if all of said premises fulfill the conditions set by

the assigned indicators, and wherein said method is such that said rules which are

determined or modified in accordance with the analysis which has been carried out are

determined or modified in that the premises for these rules are determined or modified in accordance with the analysis which has been carried out (col. 14, lines 26-30).

Claim 3

Cypher (295) teaches a method according to claim 2, wherein said device is arranged such that said rule structure is such that each premise in the rule also can be assigned an indicator (col. 15, lines 29-41) which can indicate a third condition which means that it does not matter whether the premise is true or false in order for said one or more conclusions to be intended to be executed (col. 15, lines 50-56, where combining an expression with Boolean operators allow to specify at least three different conditions in the condition menu, including the claimed third condition).

Claim 11

Cypher (295) teaches a method according to claim 2, wherein said device is arranged such that the rule structure is such that each conclusion in a rule (col. 6, lines 53-58) is assigned an indicator (col. 15, lines 29-41) which can indicate two different cases, a first case which indicates that the conclusion shall be executed or a second case which indicates that the conclusion shall not be executed, wherein a conclusion is meant to be executed if all of said premises in the rule fulfill the conditions set by the assigned indicators and the indicator of the conclusion indicates said first case (col. 15, lines 29-41; col. 17, lines 17-24. Conclusion here is a resulting part of a rule, where indicator is described by a condition that has to be met for the rule to be executed).

Claim 12

Cypher (295) teaches a method according to claim 1, wherein said device is arranged such that the rule system is divided into a plurality of rule blocks (col. 10, lines 25-28), each of which comprises one or more rules (col. 6, lines 48-50), wherein each state comprises one or more rule blocks (col. 10, lines 25-28), wherein the rules within a certain rule block concern a certain aspect of the behaviour within the state in question (col. 10, lines 52-53; col. 10, lines 66-67. Behavior is described by rules, where each rule has a simulation context, which is defined as a simulation state) and wherein the device is arranged such that said area in the decision support window also comprises the name of one or more rule blocks which form part of the state (Fig. 3C; col. 10, lines 31-34).

Claim 13

Cypher (295) teaches a method according to claim 1, wherein said device is arranged such that said name of a rule which is shown in said area in the decision support window is shown within a marked area (Fig. 3C; col. 10, lines 31-34), wherein the device is arranged such that the user inputs said instructions, which mean that one or more conclusions which form part of a certain rule shall be executed, by inputting a command when a marker is at or on said marked area (Fig. 8; col. 19, lines 66-67, col. 20, lines 1-5; inputting instructions is disclosed as programming by demonstration, such programming involves dragging and dropping a selected object, see col. 6, lines 60-67).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

12.   Claims 4, 6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Cypher at al. (US Patent No. 5,566,295) in view of McNulty et al. (US Patent No.

4,868,755).

Claim 4

Claim 4 is depended upon claim 2, rejected under 35 U.S.C. §102(b) above.

Cypher (295) fails to teach a method according to claim 2, wherein said device is

arranged such that said rules are only partly ready-formulated such that at least a

plurality of premises, which can be true or false, are defined for a plurality of said rules,

but without these premises yet have been assigned any of said indicators which indicate

some of said conditions, wherein when said device is run, it is registered whether said

plurality of premises are true or false at the occasions when the user makes said

decisions which mean that one or more conclusions which form part of a certain rule

shall be executed.

However, McNulty (755) teaches that the device is arranged such that said rules are only partly ready-formulated (col. 8, lines 6-9 discloses partly ready-formulated rules as partial plans) such that at least a plurality of premises, which can be true or false, are defined for a plurality of said rules, but without these premises yet have been assigned any of said indicators which indicate some of said conditions (rules are disclosed as maneuvers, where conclusions are disclosed as goals, and premises are determined based on disclosed parameters and conditionals. See col. 5, lines 5-10, 23-24; col. 4, lines 58-65), wherein when said device is run, it is registered whether said plurality of premises are true or false at the occasions when the user makes said decisions which mean that one or more conclusions which form part of a certain rule shall be executed (col. 7, lines 18-20 discloses registration of rules based on user decisions).

Cypher (295) and McNulty (755) are analogous art since they both can be used in vehicle simulation (see Cypher (295), col. 1, lines 29-32). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include user interface and the rules structure from Cypher (295) (col. 6, lines 48-58; col. 15, lines 29-41, 50-56) and combine it with the learning mechanism from McNulty (755) (expert system, col. 41-46). The motivation for doing so would have been to model the behavior of a human pilot and, therefore, greatly reduce the time required for development of training courses (McNulty (755), col. 8, lines 10-16). Therefore, it would have been obvious to modify Cypher (295) in view of McNulty (755) by combining a vehicle simulator with rules and graphics interface with a learning expert system.

Claim 6

Claim 6 is depended upon claim 1, rejected under 35 U.S.C. §102(b) above.

Cypher (295) teaches a method according to claim 1, wherein said device is arranged such that said rules (col. 6, lines 48-50) comprise a plurality of premises (col. 6, lines 50-53) which comprise at least one parameter which, when a value for this parameter has been determined, causes the premise to have a truth value such that the premise is true or false (col. 9, lines 32-34. Parameters are disclosed as properties associated with objects that may form "before" or "after" states).

However, Cypher (295) fails to teach that said rules are only partly ready-formulated such that at least a plurality of premises are defined without that a value of said parameter has been determined, wherein when said device is run, the value of said parameters are registered at the occasions when the user makes said decisions which mean that one or more conclusions which form part of a certain rule shall be executed.

McNulty (755) teaches that said rules are only partly ready-formulated such that at least a plurality of premises are defined without that a value of said parameter has been determined (col. 8, lines 6-9 discloses partly ready-formulated rules as partial plans), wherein when said device is run, the value of said parameters are registered at the occasions when the user makes said decisions which mean that one or more conclusions which form part of a certain rule shall be executed (col. 7, lines 18-20 discloses registration of rules based on user decisions).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include user interface and the rules structure from Cypher (295) (col. 6, lines 48-58; col. 15, lines 29-41, 50-56) and combine it with the learning mechanism from McNulty (755) (expert system, col. 41-46), using the same motivation as for claim 4 above.

Claim 8

Claim 8 is depended upon claim 2, rejected under 35 U.S.C. §102(b) above. Cypher (295) fails to teach a method according to claim 2, wherein said device is arranged such that at least a plurality of said rules are ready-formulated in such a manner that at least a plurality of premises are defined for the rules such that the premises have a truth value such that the premises are true or false and such that these premises have been assigned said indicators, wherein the device is arranged such that the user can make decisions which mean that one or more conclusions which form part of a certain rule shall be executed even if the ready-formulated rule in question does not say that the conclusion or conclusions shall be executed, wherein when said device is run, the user makes said decisions which mean that one or more conclusions which form part of a certain rule shall be executed, wherein registration takes place, at the occasions when the user makes said decisions, of whether the premises were true or false.

However, McNulty (755) teaches that said device is arranged such that at least a plurality of said rules are ready-formulated in such a manner that at least a plurality of premises are defined for the rules such that the premises have a truth value such that

the premises are true or false and such that these premises have been assigned said indicators, wherein the device is arranged such that the user can make decisions which mean that one or more conclusions which form part of a certain rule shall be executed even if the ready-formulated rule in question does not say that the conclusion or conclusions shall be executed, wherein when said device is run, the user makes said decisions which mean that one or more conclusions which form part of a certain rule shall be executed, wherein registration takes place, at the occasions when the user makes said decisions, of whether the premises were true or false.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include user interface and the rules structure from Cypher (295) (col. 6, lines 48-58; col. 15, lines 29-41, 50-56) and combine it with the learning mechanism from McNulty (755) (expert system, col. 41-46), using the same motivation as for claim 4 above.

Claim 9

Claim 9 is depended upon claim 8, rejected under 35 U.S.C. §103(a) above. Cypher (295) fails to teach a method according to claim 8, further comprising making a comparison between said registrations at the run and said ready-formulated rules.

However, McNulty (755) teaches a method according to claim 8, further comprising making a comparison between said registrations at the run and said ready-formulated rules (col. 7, lines 47-48).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include user interface and the rules structure from Cypher (295) (col. 6,

lines 48-58; col. 15, lines 29-41, 50-56) and combine it with the learning mechanism

from McNulty (755) (expert system, col. 41-46), using the same motivation as for claim

4 above.

Claim 10

Claim 10 is depended upon claim 9, rejected under 35 U.S.C. §103(a) above.

Cypher (295) fails to teach a method according to claim 9, further comprising

reformulating said ready-formulated rules on the basis of said comparison.

However, McNulty (755) teaches a method according to claim 9, further

comprising reformulating said ready-formulated rules on the basis of said comparison

(col. 7, lines 27-31, 61).

At the time of the invention, it would have been obvious to a person of ordinary

skill in the art to include user interface and the rules structure from Cypher (295) (col. 6,

lines 48-58; col. 15, lines 29-41, 50-56) and combine it with the learning mechanism

from McNulty (755) (expert system, col. 41-46), using the same motivation as for claim

4 above.

13.   Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Cypher at al. (US Patent No. 5,566,295) in view of McNulty et al. (US Patent No.

4,868,755) as applied to claims 4 and 6 above, and further in view of Hosaka et al. (US

Patent No. 4,930,084).

Claim 5

Claim 5 is depended upon claim 4, rejected under 35 U.S.C. §103(a) above.

Cypher (295) and McNulty (755) teach a method according to claim 4, further

comprising, said registration has being done at one or more runs (McNulty (755), col. 7,

lines 23-25).

However, Cypher (295) and McNulty (755) fail to teach statistically processing

the obtained registrations, thereby establishing ready-formulated rules.

Hosaka (084) teaches statistically processing the obtained registrations

(disclosed as using a fuzzy logic with statistical analysis. See col. 4, lines 26-35),

thereby establishing ready-formulated rules (Fig. 2, step S16; col. 5, lines 1-7).

Hosaka (084) deals with a vehicle control system, and, therefore, belongs to an

analogous art to the combination of Cypher (295) and McNulty (755). At the time of the

invention, it would have been obvious to a person of ordinary skill in the art to include

interface and the rules structure from Cypher (295) (col. 6, lines 48-58; col. 15, lines 29-

41, 50-56) and the learning mechanism from McNulty (755) (expert system, col. 41-46),

and combine them with the statistical analysis from Hosaka (084) (col. 4, lines 26-35)

using it as a standard decision-making technique in the expert system (McNulty (755),

col. 7, lines 51-55). Therefore, it would have been obvious to modify Cypher (295) in

view of McNulty (755), and further in view of Hosaka (084) by combining a vehicle

simulator with rules and graphics interface with a learning expert system employing a

statistical analysis for decision-making.

Claim 7

Claim 7 is depended upon claim 6, rejected under 35 U.S.C. §103(a) above.

Cypher (295) and McNulty (755) teach a method according to claim 6, further

comprising, said registrations have being done at one or more runs (McNulty (755), col.

7, lines 23-25).

However, Cypher (295) and McNulty (755) fail to teach statistically processing

the obtained registrations (disclosed as using a fuzzy logic with statistical analysis. See

col. 4, lines 26-35), thereby establishing suitable values for the parameters in the rules.

Hosaka (084) teaches statistically processing the obtained registrations, thereby

establishing suitable values for the parameters in the rules (Fig. 2, step S16; col. 5, lines

1-7).

At the time of the invention, it would have been obvious to a person of ordinary

skill in the art to include interface and the rules structure from Cypher (295) (col. 6, lines

48-58; col. 15, lines 29-41, 50-56) and the learning mechanism from McNulty (755)

(expert system, col. 41-46), and combine them with the statistical analysis from Hosaka

(084) (col. 4, lines 26-35) using it as a standard decision-making technique in the expert

system (McNulty (755), col. 7, lines 51-55), using the same motivation as for claim 5

above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Altschuler et al. (US Patent No. 5,005,143) teaches an interactive statistical system and method for predicting expert decisions. Takahashi (US Patent No. 5,162,997) teaches a control system for automotive vehicle. Rogers et al. (US Patent No. 5,602,733) teaches an automotive service equipment expert system. Mayer et al. (US Patent No. 6,259,977) teaches an aircraft flight data analysis system and method. Briffe et al. (US Patent No. 5,978,715) teaches an apparatus and method for aircraft display and control.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sergey Datskovskiy whose telephone number is (571) 272-8188. The examiner can normally be reached on Monday-Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight, can be reached on (571) 272-3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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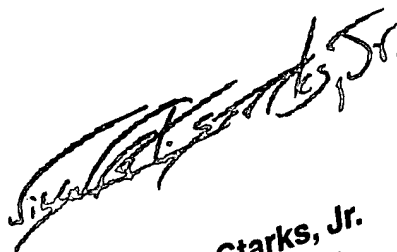
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